AGENDA
JFK Middle School Pre-Referendum Committee

Wednesday, June 29, 2016, 6:30 pm
Enfield Room
Enfield Town Hall

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES OF PRECEDING MEETINGS
    - June 15, 2016
4. UNFINISHED BUSINESS
    A. Nomination/Election of Committee Officers
    B. Discussion of Proposed Project Schedule
5. NEW BUSINESS
    A. Committee Resource Review
        - Field Study 1995
        - Strategic Building Solution Report 2015
        - Silver Petrucelli Referendum Review Proposal Handout
6. COMMITTEE COMMENTS
7. NEXT MEETING DATE
8. ADJOURNMENT

FEASIBILITY STUDY
IMPROVEMENTS TO OUTDOOR ATHLETIC FACILITIES
ENFIELD HIGH SCHOOL, FERMI HIGH SCHOOL, AND
KENNEDY MIDDLE SCHOOL
ENFIELD, CONNECTICUT

FEBRUARY, 1995

Prepared For:

Board of Education
Town of Enfield, Connecticut

Prepared by:

Milone and MacBroom, Inc.
716 South Main Street
Cheshire, CT 06410

203-271-1773

MILONE & MACBROOM, INC.

I. INTRODUCTION

Milone & MacBroom, Inc. has been engaged by the Town of Enfield Board of Education to prepare a feasibility study for improving the outdoor athletic fields in Enfield High School, Fermi High School, and Kennedy Middle School. Specifically, the Board has changed its consultant with the following tasks:

- Prepare base maps of existing conditions using the Town's new aerial photogrammetry, recent (1990) aerial photographs, and field analysis. Detailed field surveys were not included in this effort.

- Perform an analysis of the adequacy of each facility by observing field conditions, appropriateness of field layout, pedestrian access, safety, and other issues affecting the utility of the facilities. Meeting with school administrators and staff was included in this task.

- Prepare conceptual plans of improvements for each site defining the recommended improvements including modifications to meet the desired program needs expressed by the staff of each school

The existing conditions and proposed improvements of each school is discussed in detail in the balance of this report. A master plan and associated costs of improvements is also presented for each school.

II. ENFIELD HIGH SCHOOL

A. Existing Conditions

The playing fields at Enfield High School encompass approximately 20 acres of property located to the west of the school. The usable area of the site is situated approximately 35 feet in elevation below the school on an alluvial terrace associated with the nearby Connecticut River. Built in the 1960's, the site includes the following facilities:

- A football field surrounded by a six lane cinder running track, and related field event areas. Bleachers are located on each side of the field.
- Two baseball fields.
- Two softball fields.
- Soccer, hockey, and practice football fields are located seasonally across the outfield areas of the baseball/softball fields.

The playing fields are nearly level having gradients in the range of <1% to 1.5%. The broad slope between the school building and the playing area has grades in the range of 20 to 25%.

Based on several test pits, the soils were observed to have six to eight inches of topsoil over a dense silty clay. Tests of six soil samples revealed that the subsoil has poor to very poor permeability. Groundwater was observed within 12 to 18 inches of the surface in several locations. The water elevations correspond to the observed standing water on the adjoining property to the south.

There is a storm drainage culvert running south to north along the fence separating the football field from the balance of the fields. Several drainage swales along the southerly property line direct water to the inlet of the culvert. The swales are very gently sloped and the culvert orifice is partially clogged. The north-south culvert appears to connect to a 48-inch culvert running from the parking area and driveway north of the school, under the railroad tracks, to the Connecticut River. The elevation of the point of discharge was observed to be approximately 10 feet above the spring flood height of the river.

B. Observed Problems

1. Drainage: The most significant problem affecting the condition and use of the field is poor drainage, both surface and subsurface. In order for turf to drain effectively, athletic fields should have a pitch of 1% - 1.5% when there is good subsurface drainage and a steeper pitch is justified when subsurface permeability is poorer. In this instance, the field grades are very shallow and site soils are poorly drained. Consequently, the fields are not suitable for play until late spring and for a long period of time after a significant rainfall.

Due to standing pockets of water, the soil tends to become compacted resulting in a poorer quality of turf. The drainage swales along the southern perimeter of the property are inadequate. It should be noted that site's subsurface underdrainage system designed at the time when the fields were constructed was not installed. It should also be noted that the football field does not appear to exhibit the same problems since it has an adequate crown and water flows to the edges.

2. Baseball/Softball Diamonds: The primary baseball diamond located in the northeast corner of the field area has an undesirable orientation so that the batter faces the afternoon sun. This may be acceptable for practice but does not meet the recommended standard. In addition, the back stop is set too far from home plate and the fabric play is rusted. Finally, the bench areas are not sufficiently screened.

   The second baseball field is virtually unused due to poor drainage. Essentially, the entire field complex is pitched in the direction of this field. In addition, the backstop is rusted and the team benches are not adequately protected.

   The primary softball field in the north west corner tends to pond water behind the infield. This field has similar problems as the others at this site with condition of the backstop and the placement of the team benches.

   The second "practice" softball diamond is unusable due to poor drainage.

3. Football Field: The football field appears to be in good condition. However, its location is less than desirable due to its distance from the school building and parking.

4. Running Track and Field: The running track is functional at present. However, it is not a four-quarter, 400 meter facility needed for major CIAC events. The cinder surface limits its use to dry weather conditions.

C. Proposed Improvements

The quality of the fields cannot be improved significantly without first resolving the drainage problems.

- It is recommended that the fields be reconstructed by elevating the surface by approximately 15 inches and installing an underdrain system. The surface topsoil should be stripped and stockpiled and the subsoil should be regraded in a series of ridges and furrows. The underdrains should be installed and the entire site filled with well drained material prior to replacing the topsoil. Irrigation should also be considered.

- In order to gain maximum utilization of the site, it is suggested that the playing areas be relocated and properly oriented. The most significant change would be the placement of the football field close to the school taking advantage of the slope for the construction of

bleachers. The Athletic Department staff believes that it is appropriate to have one football "stadium" for the entire town capable of use by both high schools.

- An all weather (polyurethane bound EPDM) track is recommended to surround the football field. It should be designed as a four-quarter, 400 meter facility having at least six lanes with an eighty-lane sprint area. By locating it close to the school will allow it to be available for public use throughout the year.

- Within the remaining field area, it will be possible to construct the following:

  - Two baseball fields having 350-foot foul lines.
  - Two softball fields having 250-foot foul lines.
  - Two field hockey fields, each 180 feet by 300 feet.
  - Two soccer fields, each 210 feet by 360 feet.
  - Practice football area.

III. FERMI HIGH SCHOOL

A. Existing Conditions

The athletic fields at Fermi High School encompass approximately 16 acres and are located easterly of the school building. The site is irregularly shaped and it has been terraced to accommodate field construction. At present, the site supports the following facilities:

- A football field surrounded by a cinder running track. Bleachers are located on both sides of the track with the "home" bleachers being partially built into the slope.
- A primary baseball field located on the uppermost terrace to the south of the property.
- A secondary baseball field at the lowest terrace in the northern corner of the property.
- The softball field located on the middle terrace immediately adjacent to the school building.
- A practice softball diamond adjacent to the running track.
- A soccer field located in the middle terrace overlapping the softball infield.
- A practice football area in the outfield of site primary baseball field.

The fields generally appear to have appropriate grades. The only exception is the right field of the secondary baseball field which has a gradient of greater than 3 percent exceeding the recommended grade of 1.5 percent.

No unusual site drainage problems were observed. However, there are small isolated depressions which tend to trap water after rainfall occurs. These are readily correctable through routine maintenance.

B. Observed Problems

1. Field Size and Shape: The most significant problem with the fields at Fermi High School is the lack of space for both the existing events and the present needs of the physical education and athletic departments. If the site were flat (as is Enfield High School), 16 acres of land should be sufficient for the desired number of fields. However, the slopes between the terraces and the shape of the property reduce the available playing area causing overlapping events and less than desirable playing conditions.

2. Primary Baseball Field: This field is in generally good condition. However, the right field corner tends to drop-off and there is no defined outfield area. The team bench areas is not adequately projected.

3. Primary Softball Field: This field is in fairly good condition except for the backstop and the lack of protection of the team bench area. A section of the left field area is permanently without grass due to overlap with the goal box of the soccer field.

4. Secondary Baseball Field: The outfield of this facility slopes toward the infield creating and undesirable playing condition. In addition, there is inadequate projection for team benches.

5. Secondary Softball Diamond: Due to the proximity of this facility to the left field of the secondary baseball field, this facility should not be used while the baseball field is also being used. In the short term, it may be prudent to remove it from service.

6. Football: The football field appears to be in good condition. However, due to intense use, there is evidence of stress on the turf. An irrigation system would be helpful but it is not a cure for over use.

7. Track and Field: The track has a cinder surface which limits year round use. In addition, its dimensions do not qualify it as a four quarter, 400 meter facility adequate for CIAC sanctioned events. However, it is satisfactory for dry weather months.

C. Proposed Improvements

The desire of the staff at Fermi High School is to have more fields to meet the increasing player demand. To accomplish this, the following recommendations are offered:

- Create a new field for field hockey (180 feet by 300 feet) in the location of the existing parking area adjacent to the westerly driveway. A new parking area can be constructed in front of the school.

- Regrade the parts of the existing fields to permit greater separation of event areas, elimination of overlapping fields, and to achieve better field orientation. Upon completion, the facility as shown on the plan will contain the following:

  - Two baseball field with 340 to 350 foot foul lines.
  - Two softball fields with 250 foot foul lines.
  - Two soccer fields (210 feet by 360 feet).
  - Two field hockey fields (180 feet by 300 feet).
  - Practice football area.

IV. KENNEDY MIDDLE SCHOOL

A. Existing Conditions

The playing fields at Kennedy Middle School are located east of the school and encompass approximately ten acres. The field area is irregularly shaped and is situated eight to ten feet below the perimeter driveway of the school. The land to the northeast, east and south of the fields drops off sharply from the developed areas of the property.

The topography of the fields is fairly uniform having a gradient of 1% to 1.5%. Except for the area along the southerly fence, there were no apparent surface drainage problems.

There is a paved drainage swale along the fence terminating at a catch basin at the easterly most corner of the site. It is assumed that the purpose of the swale is to intercept surface runoff prior flowing over the adjacent slope. However, due to a build up of soil along the fence, drainage does not reach the swale in all instances. Moreover, the swale is partially blocked with leaves and other debris.

The soils on the site appear to be well drained. In fact, the top soil seems to be very fine, with a high percentage of sand and a low percentage of organic matter. Given these soil conditions, the turf appears to become stressed with the intensive use of the fields.

B. Observed Problems

1. Surface Drainage: The soil berm along the fence causes water to pond after a rainfall event. The simple remedy is to remove the berm to allow flow to reach the paved swale. The swale should also be maintained to permit flow to reach the catch basin.

2. Erosion: The slope between the driveway and the school fields is eroding and lacks an adequate stand of turf due to its use as an unofficial parking area for the field.

3. Baseball Field: This field has an improper orientation particularly for late afternoon play. The backstops set too far back to be effective. Their is inadequate protection of team benches.

4. Softball Field: This field has an improper orientation. The "ridge" along the infield perimeter tends to cause the ponding of water. Team benches are inadequately protected.

C. Proposed Improvements

The principal improvement needed at Kennedy Middle School fields is in the area of maintenance. Removal of the berm along the fence line and cleaning the drainage swale will be helpful. Allowing the fields to have an opportunity to rest, i.e., taking some areas out of service on a scheduled basis, would permit the grass to recover from extensive use.

The following are specific recommendations which would result in an expansion of activity areas:

- Regrade the slope adjacent to the basketball courts to permit the installation of an additional softball field having a proper orientation.
- Relocate the baseball field to the location in the southwesterly corner of the site. This location would provide for proper orientation and a foul line of 300 feet.
- Construct two additional softball fields.
- Provide for two soccer fields (195 feet by 330 feet) across the outfield areas.
- Create a parking area for field in the southwesterly corner of the site.
- Construct a field house adjacent to the parking lot to contain a storage, restrooms and a concession area.

V. BUDGET PROJECTIONS

For budgeting purposes, a preliminary estimate probable construction costs has been prepared for each school. In reviewing the costs, the reader should clearly understand the following:

1. The cost estimate that construction would be performed by a general contractor, with normal overhead and profit margins. These costs could be reduced to some extent using force accounts or some other construction arrangements and minor improvements.

2. The projected quantities are based on a master prepared from existing maps provided by the town and are not intended to be a design estimate. More accurate projections can be developed only when detailed design documents have been completed.

3. Labor costs assume full compliance with State minimum wage, insurance and bonding requirements for public works projects. They are based in part on similar work bid in the past year. Actual costs may vary depending on the business climate at the time of bidding.

ESTIMATE OF PROBABLE CONSTRUCTION COSTS
OUTDOOR ATHLETIC FIELD AT ENFIELD HIGH SCHOOL

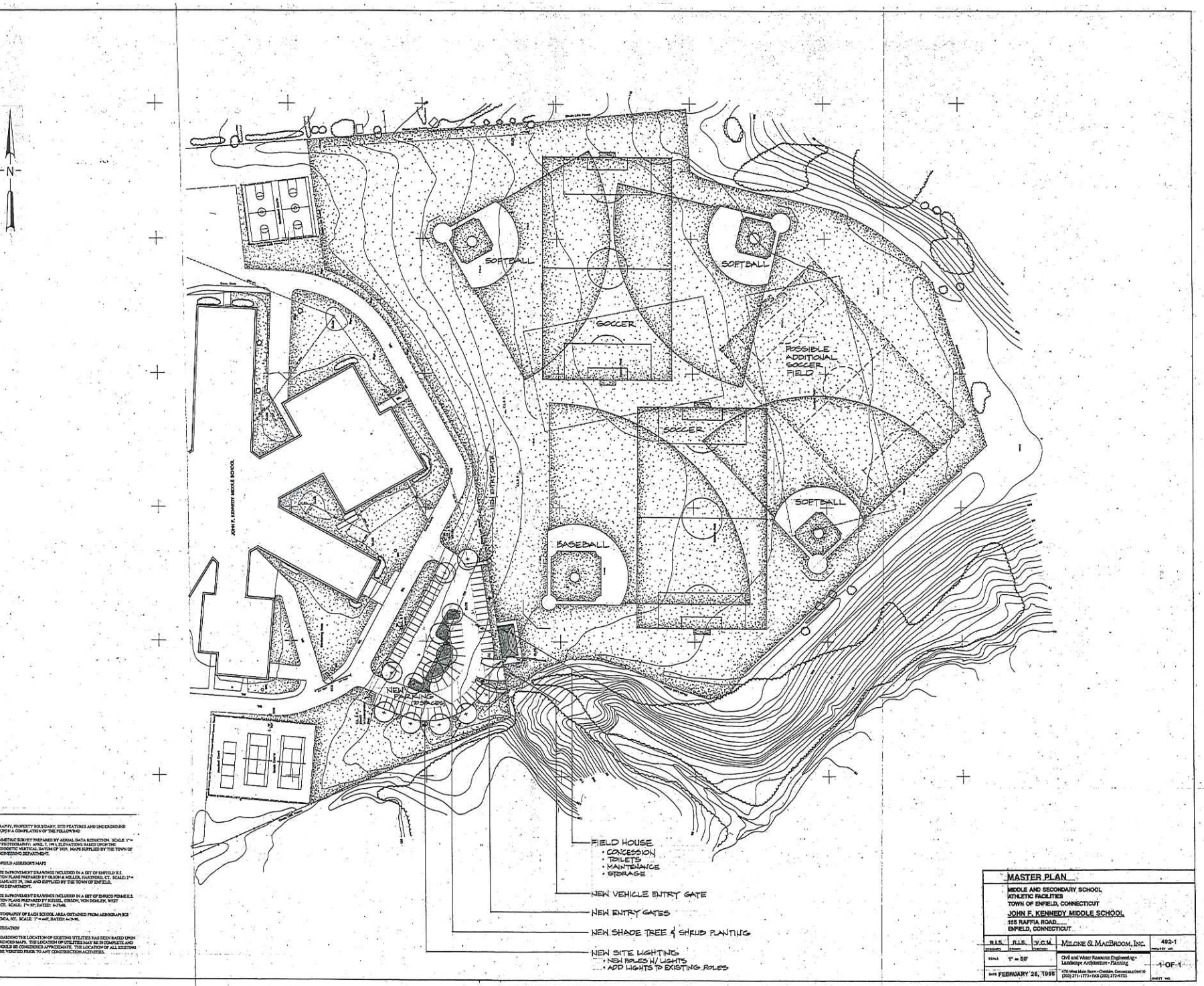
Site Removals		$ 20,000
Site Preparation		$ 25,000
Clean Gravel Fill		$ 700,000
Drainage/Underdrainage/Improvements		$ 250,000
Site Grading Topsoil and Seeding		$ 450,000
Infields		$ 25,000
Field Fixtures and Equipment (Backstops, Benches)		$ 35,000
Synthetic Track System		$ 400,000
Grandstand (±1680 seats)		$ 175,000
Field House		$ 75,000
Miscellaneous (steps, walks, misc. fencing)		$ 30,000
	Subtotal	$2,185,000
	Contingency	$ 218,000
	TOTAL (Rounded)	$2,400,000
Optional Irrigation System		$150,000

ESTIMATE OF PROBABLE CONSTRUCTION COSTS
OUTDOOR ATHLETIC FIELDS AT FERMI HIGH SCHOOL

Site Removals		$ 15,000
Site Preparation		$ 20,000
Drainage Improvements		$ 15,000
Site Grading, Topsoil, Seeding		$350,000
Infields		$ 25,000
Field Fixtures and Equipment (backstops, benches)		$ 35,000
Bleacher Rehabilitation		$150,000
Field House Expansion		$ 75,000
Landscaping		$ 20,000
New Parking Area		$125,000
Miscellaneous (fencing, lighting, etc.)		$ 20,000
	Subtotal	$850,000
	Contingency	$ 85,000
	TOTAL	$935,000
Optional Irrigation System		$150,000

ESTIMATES OF PROBABLE CONSTRUCTION COSTS
OUTDOOR ATHLETIC FIELDS AT KENNEDY MIDDLE SCHOOL

Site Removals	$ 5,000
Site Preparation	$ 5,000
Drainage Improvements	$ 5,000
Site Grading, Topsoil, Seeding	$125,000
Infields	$ 20,000
Field Fixtures and Equipment (backstops, benches, etc.)	$ 25,000
Field House	$ 75,000
Parking Area	$ 85,000
Landscaping	$ 5,000
Miscellaneous (fencing, site lighting)	$ 20,000
Subtotal	$370,000
Contingency	$ 37,000
TOTAL (Rounded)	$410,000



GENERAL NOTES

1. EXISTING TOPOGRAPHY, PROPERTY BOUNDARY, SITE FEATURES AND UNDERGROUND UTILITIES BASED UPON A COMPILATION OF THE FOLLOWING:
   A. PHOTOGRAMMETRIC SURVEY PREPARED BY AERIAL DATA REDUCTION. SCALE: 1"= 40'; DATE OF PHOTOGRAPHY: APRIL 7, 1991; ELEVATIONS BASED UPON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929. MAPS SUPPLIED BY THE TOWN OF ENFIELD, ENGINEERING DEPARTMENT.
   B. TOWN OF ENFIELD ASSESSOR'S MAPS
   C. VARIOUS SITE IMPROVEMENT DRAWINGS INCLUDED IN A SET OF ENFIELD H.S. CONSTRUCTION PLANS PREPARED BY GLIDDEN & MILLER, HARTFORD, CT. SCALE: 1"= 30'; DATED: JANUARY 29, 1960 AND SUPPLIED BY THE TOWN OF ENFIELD, ENGINEERING DEPARTMENT.
   D. VARIOUS SITE IMPROVEMENT DRAWINGS INCLUDED IN A SET OF ENFIELD H.S. CONSTRUCTION PLANS PREPARED BY RUSSEL, GIBSON, VON DOHLEN, WEST HARTFORD, CT. SCALE: 1"= 30'; DATED: 6-17-68.
   E. AERIAL PHOTOGRAPHY OF EACH SCHOOL AREA OBTAINED FROM AEROGRAPHICS CORP., BOHEMIA, NY. SCALE: 1" = 400', DATED: 4-19-91.
   F. FIELD INVESTIGATION
2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON THE ABOVE REFERENCED MAPS. THE LOCATION OF UTILITIES MAY BE INCOMPLETE AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY CONSTRUCTION ACTIVITIES.

MASTER PLAN

MIDDLE AND SECONDARY SCHOOL
ATHLETIC FACILITIES
TOWN OF ENFIELD, CONNECTICUT
JOHN F. KENNEDY MIDDLE SCHOOL
155 RAFFIA ROAD
ENFIELD, CONNECTICUT

R.I.S. DESIGNED	R.I.S. DRAWN	V.C.M. CHECKED	MILONE & MACBROOM, INC.	492-1 PROJECT NO.
SCALE	1" = 50'		Civil and Water Resource Engineering • Landscape Architecture • Planning	1 OF 1 SHEET NO.
DATE	FEBRUARY 26, 1996		470 West Main Street • Cheshire, Connecticut 06410 (203) 271-1773 • FAX (203) 272-9733	

JFK Pre-Referendum Committee Meeting Minutes
June 15 2016
Enfield Room

Called to order at 7:03

Roll Call

Present: Tom Arnone, Mark Gahr, Scott Kaupin, Mary Keller, Tina Leblanc, Joseph Muller, Trish Neild Barry, Carmen Nuccio, Ray Peabody, Christopher Rutledge, Steve Sargalski

Absent: Scott Ellis

Introductions-speak about motivations, define next steps and expectations of the group.

There is a tight timeframe-have the summer to get all referendum information to the Town Council to make a decision.

There will be a referendum page with relevant documents on the website.

Appointed vs. Liaisons-Appointed members will be voting members, liaisons will be available for guidance.

Proposed project schedule-what should the group start looking at?

Goals

Classroom space

Explore options for replacing portables

- 3 wings are single floor
- Connect 2 wings
- Build to replace portables
    - Site build construction
    - Module factory build

Auditorium

- Staging
- Sound system
- Seating
- Electrical
- Band storage
- Music instructional space

Cafeteria (set priority)

- Kitchen equipment
- Cooking JFK or EHS
- Capacity Analysis

Gym

- Additional teaching station
- Bleachers (ADA)
- Divider walls-replace
- Lighting
- Floor replacement
- Verify locker room
    - Showers
    - ADP
    - Storage space
    - Toilets
    - Window

Pool

- Plumbing
- Filter
- Metal plumbing
- Inadequate flow
- Water turn over (fix or fill?)
- Need new estimate ($250,000 for pipeline)
- HVAC-humidifier

Special service needs

Rest rooms-evaluate

Evaluate additional computer labs

Art rooms

- Space utilization
- Co-locate

Science Rooms

- Lab use
- Modify to meet curriculum needs

Evaluate FACS Equipment against anticipated curriculum

Sustainability of 20 years

Population to decrease 10% over 20 years

Shop

- Evaluate Shop conditions and equipment

Mechanical

- HVAC
    - Energy referendum (book)

Will JFK be town shelter?

- Generator
  - Town Shelter
  - Capacity

IT infrastructure

- Security
- Cameras
- Windows

Exterior

- Parking lot
- Exterior lighting
- Signage
- Doors
- Windows
- Roof
- Façade
- Tennis Courts
- Basketball park
- Beautification
- Toilets

Fields

- Update Malone and Macbroom field study
- Test ground
- Use
  - School
  - Rec/town
- Irrigation
- Lighting
- Fencing/ADA
- Sports
  - Soccer
  - Baseball
  - Basketball
  - Field Hockey
  - Track

Storage Building

ADA compliance to the fields

Toilets

Solar ready

Any marketing or information to be sent out should be 2-3 weeks before. Solid numbers (cost estimates) will be needed by the end of September.

Bryan and Jeff will need to sit down with their people and go through the libraries and see what current reports can be pulled together. Must go out to Milone and McBroom and other resources to see what the cost would be to update these reports.

Group is in agreement that the timeline should not be rushed. After investigation on how much work needs to be done for the pre-referendum, which election to place it in can be decided.

Leadership positions will be explored at the next meeting.

Adjourned at 8:54 pm

Building: **JFK Middle School**

System	Subsystem	Sub-Subsystem	Location	Description	Estimated Cost	Priority
Exterior Shell						
234	Openings	Exterior Doors		Replace overhead door and frame to pool loading area/store room	$8.0	1
225	Openings	Exterior Doors	Exterior	Replace exterior single-leaf hollow metal doors and frames from mechanical rooms, shops, and locker rooms	$24.5	1
224	Openings	Exterior Doors		Replace selected aluminum entry doors from stairwells and corridors; new doors to be at code-compliant width	$56.7	2
205	Openings	Windows	Original Building	Replace singe-glazed windows throughout original building	$1,176.0	1
255	Openings	Windows	Roof	Repair glass block windows on 2nd floor above roof areas	$1.0	2
268	Roof	Membrane	Roof	Replace tar and gravel roof on Red, White, and Blue Wings and gymnasium	$828.0	1
269	Roof	Membrane	Roof	Replace tar and gravel roof on remaining roof areas on original building	$1,704.0	2
223	Walls	Exterior Masonry	Exterior	Repair and restore exterior masonry to prevent continued water infiltration through interior walls	$644.0	1
262	Walls	Exterior Masonry	New Addition	Remove capstones, reflash wall and replace at gable ends of addition	$30.0	1
265	Walls	Siding	Modular Classrooms	Refurbish exterior siding, stairs, and walkway on modular classrooms	$20.0	1
				Exterior Shell Subtotal	**$4,492.2**	
Interior Shell						
209	Ceilings	Acoustical	Kitchen	Replace acoustical ceiling system in kitchen with vinyl clad ceiling tiles	$26.0	1
216	Ceilings	Acoustical	Core	Replace acoustical ceiling tile systems in core corridor	$52.2	2
211	Ceilings	Acoustical	Green Wing	Replace acoustical ceiling tile systems in corridors, faculty workroom, faculty dining room, and toilet rooms in Green Wing	$19.6	2
215	Ceilings	Acoustical	Auditorium	Replace acoustical ceiling tile system in auditorium	$74.0	2
214	Ceilings	Acoustical	Black Wing	Replace acoustical ceiling tile systems in black wing	$112.5	2
206	Ceilings	Acoustical	Red Wing	Replace acoustical ceiling systems in Red Wing	$152.9	2
208	Ceilings	Acoustical	Blue Wing	Replace acoustical ceiling systems in Blue Wing	$152.9	2
207	Ceilings	Acoustical	White Wing	Replace acoustical ceiling systems in White Wing	$152.9	2
213	Ceilings	Acoustical	Administration Wing	Replace acoustical ceiling tile systems in selected offices in administration wing	$14.0	2
212	Ceilings	Acoustical	Yellow Wing	Replace accoustical ceiling tile systems in Yellow Wing	$157.9	2
210	Ceilings	Acoustical	Cafeteria	Replace acoustical ceiling tile system in cafeteria	$39.2	3
233	Doors	Wood Doors	Pool	Replace interior doors from pool to locker rooms and storage rooms	$14.0	1
266	Floor	Carpet	Modular Classrooms	Replace carpet in modular classrooms	$12.0	1

Building: **JFK Middle School**

System	Subsystem	Sub-Subsystem	Location	Description	Estimated Cost	Priority
231	Floor	Ceramic Tile	Pool	Repair and regrout tile in pool and deck; replace drain covers	$30.0	1
220	Floor	Epoxy	Shops	Repaint epoxy floors in technical education shops	$26.6	2
221	Floor	Vinyl	Cafeteria	Replace vinyl floor tile in cafeteria	$39.2	2
217	Floor	Vinyl	Corridors	Replace vinyl floor tile in 1st floor corridors throughout	$144.9	2
218	Floor	Vinyl	Classrooms	Replace vinyl floor tile in 1st floor classrooms throughout	$451.1	3
222	Floor	Vinyl	Faculty Rooms	Replace vinyl floor tile in faculty dining room and workroom	$10.3	3
219	Floor	Vinyl	Administration	Replace vinyl floor tile in administrative offices	$37.1	3
236	Floor	Wood	Gymnasium	Replace gym floor	$172.0	3
244	Furnishings	Acad. Furniture	Classrooms	Replace blackboards with white boards/tack boards in selected classrooms	$90.0	2
241	Furnishings	Specialty Furniture	Classrooms	Replace metal casework along windows in classrooms	$306.0	1
229	Furnishings	Specialty Furniture	Girls Locker Room	Replace modesty curtain rod system in girls locker room	$10.2	1
228	Furnishings	Specialty Furniture	Locker Rooms	Replace benches in locker rooms	$12.5	1
227	Furnishings	Specialty Furniture	Girls Locker Room	Replace lockers at shower stalls in girls locker room	$10.2	1
252	Furnishings	Specialty Furniture	Art Rooms	Replace sink cabinetry and traps in art rooms 21s	$30.0	1
243	Furnishings	Specialty Furniture	Auditorium	Replace auditorium seating	$144.0	1
226	Furnishings	Specialty Furniture	Locker Rooms	Refurbish lockers in both boys and girls locker rooms	$47.6	1
247	Furnishings	Specialty Furniture	Food	Replace kitchen cabinetry in consumer science rooms	$54.0	2
239	Furnishings	Specialty Furniture	Corridors	Replace and reconfigure student lockers in corridors	$355.2	2
237	Furnishings	Specialty Furniture	Gym	Replace (4) bleachers with code-compliant in gymnasium	$39.6	2
238	Furnishings	Specialty Furniture	Gymnasium	Replace moveable divider walls in gymnasium (72'x18')	$198.3	3
246	Furnishings	Window Treatment	General	Replace window blinds throughout original building	$58.8	1
256	Other Interior	Bathrooms	Toilet Rooms	Refurbish toilet rooms throughout original building	$200.0	2
251	Walls & Partitions	Paneling	Band Room	Replace existing accoustical wall panels in band room	$3.5	1
248	Walls & Partitions	Plaster/Wallboard		Replace partition with proper sound isolation between classrooms 34 and 40	$3.5	1
263	Walls & Partitions	Wall Painting	General	Paint interior of building throughout	$296.0	1
				Interior Shell Subtotal	**$3,750.5**	
HVAC						
744	Building End Use	AHU/A.C.		Replace air conditioning and condensing units located on high roof	$30.0	2
846	Building End Use	Cabinet Heaters		Install cabinet heaters (Honeywell)	$11.7	1
718	Building End Use	Unit Ventilator		Replace original unit ventilators in classrooms	$1,170.0	2

Building: **JFK Middle School**

System	Subsystem	Sub-Subsystem	Location	Description	Estimated Cost	Priority
854	Controls	DDC		Upgrade BMS controls (Honeywell)	$363.5	1
719	Distribution	AHU		Replace heating and ventilating units 1, 2, 3, 4, 5, 6, 7, 8, 9, and 11	$420.0	2
819	Distribution	Pumps		Upgrade heating hot water pumps (Honeywell)	$7.5	1
790	Generation	Boilers		Upgrade boiler plant (Honeywell)	$654.8	1
825	Mechanical	Kitchen Equipment		Replace kitchen equipment (Honeywell)	$109.3	1
827	Mechanical	Pool Equipment		Install pool dehumidification unit (Honeywell)	$343.6	1
				HVAC Subtotal	**$3,110.5**	
Electrical						
777	Lighting	Light Fixtures		Upgrade lighting and lighting controls (Honeywell)	$297.5	1
717	Power	Main Distribution Gea		Upgrade and expand selected panels and feeders	$785.8	1
1034	Specialty Systems	Emerg. Generator/AT		Replace automatic transfer switch breaker	$25.0	1
715	Specialty Systems	Emerg. Generator/AT		Replace emergency generators	$275.0	2
259	Specialty Systems	Other Electrical		Replace clock/bell system	$231.0	2
				Electrical Subtotal	**$1,614.2**	
Plumbing						
877	Fixtures	Bathroom		Implement water conservation measures (Honeywell)	$44.9	1
232	Specialty Plumbin	Pool Systems	Pool	Upgrade pool pump and filtration system	$450.0	1
716	Specialty Plumbin	Pool Systems		Repair/replace pool piping	$150.0	1
				Plumbing Subtotal	**$644.9**	
Grounds						
491	Athletics	Bleachers		Replace portable field bleachers	$48.0	1
483	Athletics	Courts	Tennis Courts	Repair cracks in tennis courts	$10.0	1
490	Athletics	Courts	Basketball Courts	Repair basketball court surface	$7.5	2
489	Athletics	Courts	Basketball Courts	Reconstruct basketball courts	$52.5	3
484	Athletics	Courts	Tennis Courts	Refurbish tennis court surface , including removing existing surface, repairing base and installing new surface and painting	$120.0	3
500	Plant Material	Landscaping		Re-establish lawns in selected areas	$7.0	1
487	Roads & Paths	Curbing		Replace concrete curbing at door #2 and door #10	$3.0	1

Building: **JFK Middle School**

System	Subsystem	Sub-Subsystem	Location	Description	Estimated Cost	Priority
492	Roads & Paths	Gates & Fences		Repair perimeter fence by at baseball field foul pole	$2.5	1
488	Roads & Paths	Parking	North Lot	Mill, repair base, topcoat, and restripe north parking lots	$221.4	2
486	Roads & Paths	Parking	ADA Lot	Mill, repair base, topcoat, and restripe northeast ADA parking lot	$24.0	2
482	Roads & Paths	Parking	South Lot	Mill, repair base, topcoat, and restripe south parking lot	$230.4	2
485	Roads & Paths	Roadways		Mill, repair base, topcoat and repair concrete curbing on roadway and sidewalks around building	$207.0	2
				Grounds Subtotal	**$933.3**	
Statutory						
250	Building Safety	Elec. Equip. Safety	Shops	Relocate power stop shunts to exit doors in shops	$0.6	2
270	Building Safety	Other Safety		Install security blinds on corridor doors	$11.8	1
258	Building Safety	Other Safety	General	Replace cooridor doors and knobs with security lever hardware	$236.0	1
240	Building Safety	Other Safety	R12	Replace emergency gas shut-off switch with shunt valve in science room R12	$0.4	2
235	Building Safety	Railings	Pool Mechanical Roo	Install removable rail at step from storage room to pool mechanical room	$0.8	2
249	Building Safety	Railings	Chorus Room	Install railings on stair to stage area in chorus room	$1.0	3
253	Building Safety	Stairs & Ladders	Roof	Install roof ladders to access upper roof areas	$28.0	1
254	Building Safety	Stairs & Ladders	Roof	Install roof hatch to provide fixed access to roof	$6.0	1
264	Egress	Doors		Construct walkways from exit doors in courtyards to existing sidewalks and parking areas	$20.0	1
261	Egress	Exit Signs	Kitchen	Install (3) additional exit signs/emergency light combination units in kitchen	$2.4	1
230	Egress	Exit Signs	Locker Rooms	Install (4) additional exit signs in locker rooms	$3.2	2
242	Egress	Stair	Stairwells	Modify stairwell railings to meet current code	$21.0	3
245	Fire Safety	Fire Doors/Closers		Replace door assemblies to stairwells with code-compliant width doors	$291.6	2
267	Fire Safety	Fire Separation	Boiler Room	Repair holes in ceiling to provide fire separation in boiler room	$1.5	1
				Statutory Subtotal	**$624.3**	
Accessibility						
257	Bldg. Circulation	ADA Hardware		Replace door knobs with lever-type in non-corridor doors	$35.0	1
260	Public Services	Water Fountain	General	Replace drinking fountains with ADA compliant	$64.0	2
				Accessibility Subtotal	**$99.0**	

Draft

Building: **JFK Middle School**

System	*Subsystem*	*Sub-Subsystem*	*Location*	*Description*	*Estimated Cost*	*Priority*
JFK Middle School Subtotal					**$15,268.9**	

Town of Enfield

JFK Middle School Code Analysis

Proposed 4 Classroom Addition

June 25, 2014

Silver Petrucelli & Associates

Code Analysis

Code Analyzed:	2005 Ct IBC & 2011 Ct IBC supplement
Date of original construction:	1964
Date of Additions:	2001
Existing Construction type:	2B (1964 addition & 2001 addition)
Use Group Classification of 1964 bldg:	E
Use Group Classification of 2001 bldg:	A3
Conversion Factor of 1964 bldg.:	3.46%
Conversion Factor of 2001 bldg.:	4.17%
Allowable Building area for 1964 bldg.:	50,170 s.f.
Allowable Building area for 2001 bldg.:	39,615 s.f.
Allowable Height for 1964 bldg:	3 Stories, 75 feet
Allowable Height for 2001 bldg:	3 Stories, 75 feet
Actual Building Area (1964 bldg):	157,150 s.f. (121,555 1st floor & 35,595 2nd floor)
Actual Building Area (2001 addition)	11,080 s.f.
Allowable increase to 1964 bldg:	0 s.f. (unless fire wall and lot line are created)
Allowable increase to 2001 bldg:	28,535 s.f. (without need of fire wall or lot line)
Occupant load (Design total for bldg.):	4939 occupant (1964 bldg & 2001 bldg)
Exit capacity for entire bldg.:	10,416 Occupants
Accessible Building:	Designated
Fire Suppression system:	Full Suppression
Notification & Alarms:	100%
Detection:	100%
Threshold Limit Building:	No
Historic Building:	No
Existing Finishes:	Class A in exists, Class B in corridors

Field Notes on Existing Building

Exterior wall:	Masonry (no rating required)
Corridor Walls:	Masonry
First Floor:	Concrete slab on grade (on 1st floor)
Second Floor:	5.25 conc. slab over metal deck over steel beams
Roof:	Metal deck over steel beams & joists

Note:

A 2hour fire wall was created between the 1964 structure and the 2001 addition as the existing Building exceeds the allowable area. If an addition is constructed onto the 64 addition, an additional fire wall and lot line will need to be created. If the addition is placed on the 2001 addition and is less than 28,535 s.f., it appears that no lot line nor fire wall are required.

Enfield Public Schools

Proposed 4 Classroom Addition, JFK Middle School

6/25/2014

Opinion of Probabale Construction Cost

Assume 70.36% State Reimbursement Rate (current)

Task	s.f.	Total Cost per s.f.	Total Project Development Cost
01 0000 General Requirements			
General Requirements	6,000	$0.00	$0
Subtotal	**6,000**	**$0.00**	**$0**
02 0000 Abatement			
Existing Conditions abatement (asb & lead)	1,000	LS	$50,000
Existing Conditions abatement (PCB)	1,000	LS	$50,000
Subtotal	**1,000**		**$100,000**
02 000 Demolition			
Existing Conditions - Selective Demolition	5,000	$5.00	$25,000
Subtotal	**5,000**		**$25,000**
03 0000 Concrete			
Existing Conditions - Concrete	1,000	$4.00	$4,000
New Conditions - Concrete on grade	6,000	$16.00	$96,000
New Conditions - Concrete on deck	0	$5.00	$0
Subtotal	**7,000**		**$100,000**
04 000 Masonry			
Existing Conditions - Masonry	1,000	$9.00	$9,000
New Conditions - Masonry	6,000	$25.00	$150,000
Subtotal	**7,000**		**$159,000**
05 000 Structural Steel			
Existing Conditions - Steel	1,000	$13.00	$13,000
New Conditions - Steel	6,000	$26.00	$156,000
Subtotal	**7,000**		**$169,000**
06 000 Rough Carpentry			
Existing Conditions - Carpentry	1,000	$1.50	$1,500
New Conditions - Carpentry	6,000	$4.00	$24,000
Subtotal	**7,000**		**$25,500**
06 000 Finish Carpentry			
Existing Conditions - Finish Carpentry	1,000	$10.00	$10,000
New Conditions - Finish Carpentry	6,000	$14.00	$84,000
Subtotal	**7,000**		**$94,000**
07 000 Thermal & Moisture Protection			
Existing Conditions - Thermal & Moisture	1,000	$12.00	$12,000
New Conditions - Thermal & Moisture	6,000	$28.00	$168,000
Subtotal	**7,000**		**$180,000**
08 000 Doors & Windows			
Existing Conditions - Doors & Windows	1,000	$16.00	$16,000
New Conditions - Doors & Windows	6,000	$20.00	$120,000
Subtotal	**7,000**		**$136,000**
09 000 Finishes			
Existing Conditions - Finishes	1,000	$18.00	$18,000
New Conditions - Finishes	6,000	$22.00	$132,000
Subtotal	**7,000**		**$150,000**

Enfield Public Schools, JFK Middle School
Preliminary Opinion of Probable Construction 6-25-14

10 000 Specialties			
Existing Conditions - Specialties	1,000	$5.00	$5,000
New Conditions - Specialties	6,000	$6.00	$36,000
Subtotal	**7,000**		**$41,000**
11 000 Equipment			
Existing Conditions - Equipment	1,000	$8.00	$8,000
New Conditions - Equipment	6,000	$8.00	$48,000
Subtotal	**7,000**		**$56,000**
12 000 Furnishings			
Existing Conditions - Furnishings	1,000	$6.50	$6,500
New Conditions - Furnishings	6,000	$6.50	$39,000
Subtotal	**7,000**		**$45,500**
13 000 Specialty Systems			
Existing Conditions - Specialty Systems	1,000	$3.00	$3,000
New Conditions - Specialty Systems	6,000	$3.00	$18,000
Subtotal	**7,000**		**$21,000**
14 000 Conveyance System			
Existing Conditions - Conveyance System	1,000	$0.00	$0
New Conditions - Conveyance System	6,000	$0.00	$0
Subtotal	**7,000**		**$0**
21 000 Fire Protection			
Existing Conditions - Fire protection	1,000	$7.50	$7,500
New Conditions - Fire protection	6,000	$6.50	$39,000
Subtotal	**7,000**		**$46,500**
22 000 Plumbing			
Existing Conditions - Plumbing	1,000	$12.00	$12,000
New Conditions - Plumbing	6,000	$14.00	$84,000
Subtotal	**7,000**		**$96,000**
23 000 HVAC			
Existing Conditions - hvac	1,000	$45.00	$45,000
New Conditions - hvac	6,000	$50.00	$300,000
Subtotal	**7,000**		**$345,000**
26 000 Electrical			
Existing Conditions - Electrical	1,000	$30.00	$30,000
New Conditions - Electrical	6,000	$30.00	$180,000
MEP temporary connections & interface	1,000	$2.00	$2,000
Subtotal			**$212,000**
31 000 Earthwork/Exterior Improvements			
Existing / New Conditions - Earthwork	6,000	$25.00	$150,000
Subtotal	**6,000**		**$150,000**
Additional Expenses			
Construction Estimate at time of feasibility		8%	$130,000
Inflation factor for 2014-2016		8%	$172,120
CONSTRUCTION TOTAL			
Construction Total			**$2,453,620**

Enfield Public Schools, JFK Middle School
Preliminary Opinion of Probable Construction 6-25-14

Soft Costs - Design & Professional Fees			
A&E fees from SD through CA (6.0%)			$147,217
Printing Costs			$10,000
As-Builts			$2,000
Voice/AV consultant			$0
Security consultant			$7,500
lighting consultant			$0
Acoustical consultant			$8,000
Energy Modeling (HPBR)			$5,000
Life cycle analysis			$0
kitchen & food service consultant			$0
geotechnical consult.			$4,500
Exterior Envelope consultant/review			$0
Traffic study			$0
BSF addendum review process			$1,200
Site Survey			$12,000
Haz. Materials, radon, PCB testing & Design			$7,500
Theater / stage consultant			$0
Special Inspections			$7,500
Commissioning coordination			$0
Environmental CA services			$7,500
LEED consultant			$0
Soft Costs - Other Professional Fees			
Program Manager fees			$0
CM Preconstruction fee			$0
Commissioning Agent			$25,000
Construction Material Testing			$10,000
Builders Risk			$6,134
Owners Construction Rep			$50,000
FTP Site / Prolog fees			$0
Soft Costs - Other Fees			
legal costs (ads. Etc)			$2,500
Printing costs during CA			$1,500
Furniture Coordinator			$0
Local Plan review costs			$15,000
Soft Costs - Construction Manager Fees			
CM general conditions (6%)			$147,217
CM contingency (8%)			$196,290
CM general requirements			$35,000
CM Fee (3%)			$73,609
CM bonds			$19,629
Liability Insurance			$4,907

Enfield Public Schools, JFK Middle School
Preliminary Opinion of Probable Construction 6-25-14

Soft Costs - Fixtures, Furnishings & Equipment			
Furnishings			$0
Auditorium Equipment			$0
Gymnasium equipment			$0
Technology			$40,000
Misc. Equipment (small ware, books, etc)			$0
Soft Costs - Contingencies & Allowances			
Owner contingency (8%)			$196,290
Design Contingency (4%)			$98,145
Bonding Costs			$35,000
State Building permit (assumes no local cost)			$687
Environmental conditions / winter conditions			$15,000
IAQ allowance			$5,000
Final Cleaning Allowance			$2,500
C.A. Drawing Reproduction allowance			$1,200
Soft Cost Total			**$1,200,524**

	Ineligible	Limited Eligible	Eligible
Amount	$250,000	250,000	$3,154,144
Reimbursement Rate	0.00%	35.18%	70.36%
Space Penalty	0.00%	100.00%	100.00%
State of Ct Share	$0.00	$87,950	$2,219,256
Enfield Share	$250,000	$162,050	$934,888
Total State Share			$2,307,206
Total Enfield Share			$1,346,938
Total Project Cost			**$3,654,144**

Existing Alteration Cost / s.f. (excluding soft costs) $300.00 / s.f.

Proposed Addition Cost / s.f. (excluding soft costs) $350.00 / s.f.

SPACE STANDARDS WORKSHEET

This worksheet should be completed and submitted with the application for any N (new), E (extension), A (alteration), or RENO (renovation) project, or combination of such types of project.

State Standard Space Specifications
Grades

Projected Enrollment	Pre-K and K	1	2	3	4	5	6	7	8	9	10	11	12
	Allowable Square Footage per Pupil												
0 - 350	124	124	124	124	124	156	156	180	180	180	194	194	194
351 - 750	120	120	120	120	120	152	152	176	176	176	190	190	190
751 - 1500	116	116	116	116	116	148	148	170	170	170	184	184	184
Over 1500	112	112	112	112	112	142	142	164	164	164	178	178	178

1. Under the column headed "Projected Enrollment", find the range within which your school's highest projected 8 year enrollment falls.
2. Using the figures on that line, complete the grid below for only those grades housed within the school.

Pre-K		6	148
K		7	170
1		8	170
2		9	
3		10	
4		11	
5		12	

(a)	Total (grades Pre-K through 12)	488
(b)	Number of grades housed	3
(c)	Average [(a)/(b)]	163
(d)	Highest Projected 8-year Enrollment	1200
(e)	Maximum Square Footage [(c) x(d)]	195600

3. Total square footage at completion of project:
   a. Existing area constructed pre-1950. 0
   b. Multiply "a." by 80%
   c. Area (at completion of project) constructed1950 or later. 174,230
   d. Square footage for space standards computation (b+c). 174,230

If line 2(e) is greater than line 3(d) there is no grant reduction.

If line 3(d) is greater than line 2(e), divide line 2(e) by line 3(d). 100%

* This factor will be used to reduce total eligible costs because of space in excess of the maximum eligible for reimbursement.
If a project exceeds the standards solely as the result of extraordinary programmatic requirements, the superintendent may submit a request to the Commissioner for a waiver. A detailed list of space allocations for all extraordinary programs with explanations must be included with the request.

INSTRUCTIONS FOR
SPACE STANDARDS WORKSHEET

The enclosed worksheet will assist you in computing the maximum facility total square footage eligible for reimbursement for this project. This worksheet must be submitted with your school construction grant application package for any N (new), E (extension), A (alteration), or RENO (renovation) project, or combination of such types of project.

Please refer to the worksheet itself for direction. It is self-explanatory.